



Organisation of Plant Tissues and Growth

Organisasi Tisu Tumbuhan dan Pertumbuhan

PAPER 1

1 Which of the following are tissues found in plants?

Antara yang berikut, yang manakah tisu yang terdapat dalam tumbuhan?

I Epidermal tissues

Tisu epidermis

II Ground tissues

Tisu asas

III Nerve tissues

Tisu saraf

IV Muscle tissues

Tisu otot

A I and II

I dan II

C III and IV

III dan IV

B II and III

II dan III

D I and IV

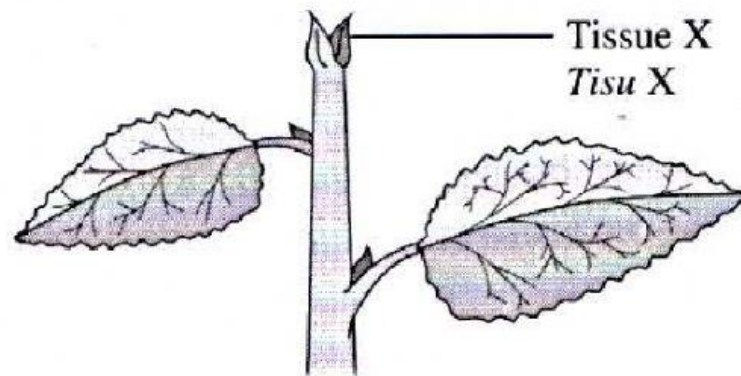
I dan IV

- 2 Which of the following is a correct match between a plant tissue and its main function?
Antara yang berikut, padanan manakah yang betul antara tisu tumbuhan dengan fungsi utamanya?

	Type of tissue <i>Jenis tisu</i>	Function <i>Fungsi</i>
A	Epidermal tissue <i>Tisu epidermis</i>	Protects the underlying tissues <i>Melindungi tisu-tisu di bawahnya</i>
B	Parenchyma tissue <i>Tisu parenkima</i>	Transports water and mineral salts from the roots to the leaves <i>Mengangkut air dan garam mineral dari akar ke daun</i>
C	Sclerenchyma tissue <i>Tisu sklerenkima</i>	Transports organic nutrients <i>Mengangkut nutrien organik</i>

- 3 The diagram below shows a stem cutting of a plant.

Rajah di bawah menunjukkan satu keratan pokok.



What is tissue X?

Apakah tisu X?

- A Apical meristem
Meristem apeks
- B Lateral meristem
Meristem lateral
- C Xylem
Xilem
- D Phloem
Floem

4 The list below shows the characteristics of plant Z.

Senarai di bawah menunjukkan ciri-ciri tumbuhan Z.

- It undergoes secondary growth
Menjalani pertumbuhan sekunder
- It is used to make furnitures
Digunakan untuk membuat perabot

What is most probably plant Z?

Apakah tumbuhan Z yang mungkin?

- A *Agave* sp.
- B Banana tree
Pokok pisang
- C Mango tree
Pokok mangga
- D Meranti tree
Pokok meranti

5 Which of the following statements about the zone of the cell division of plants is true?

Antara pernyataan berikut, yang manakah benar mengenai zon pembahagian sel tumbuhan?

A Involves the process of vacuolation

Melibatkan proses pemvakuolan

B Forms vascular tissues, xylem and phloem

Membentuk tisu vaskular, xilem dan floem

C Occurs at the apical meristem

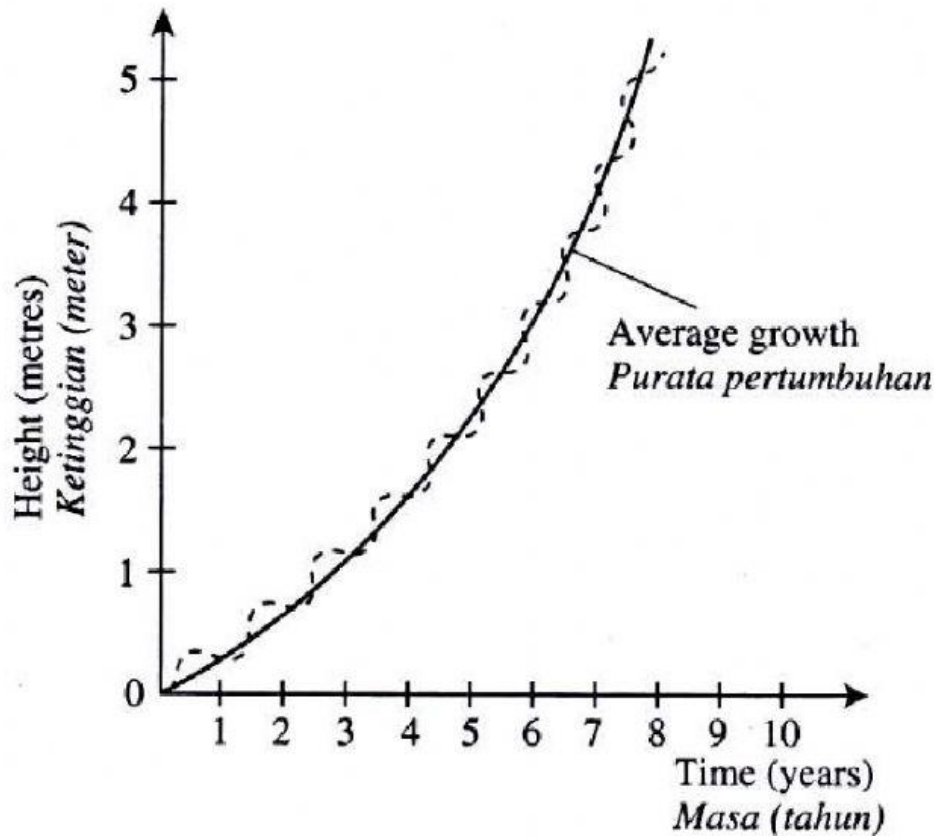
Berlaku di meristem apeks

D Cells absorb water by osmosis

Sel menyerap air secara osmosis

- 6 The diagram below shows the growth curve of a plant.

Rajah di bawah menunjukkan satu lengkung pertumbuhan bagi sejenis tumbuhan.



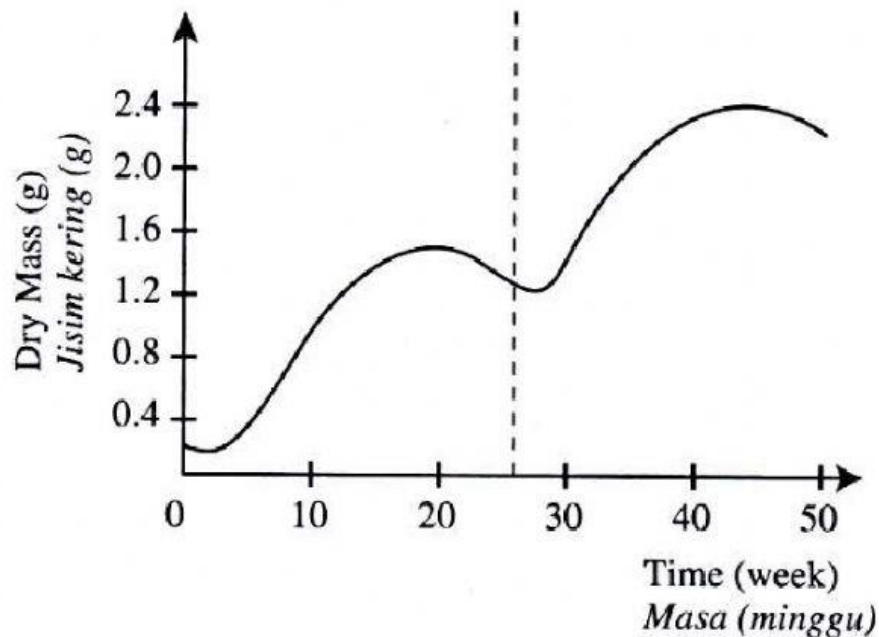
What is the type of plant based on the above growth curve?

Apakah jenis tumbuhan tersebut berdasarkan lengkung pertumbuhan di atas?

- A Annual plant
Tumbuhan semusim
- B Perennial plant
Tumbuhan saka
- C Biennial plant
Tumbuhan dwimusim

- 7 The diagram below shows the growth curve of **HOTS** biennial plants.

Rajah di bawah menunjukkan lengkung pertumbuhan tumbuhan dwimusim.



Why does this growth curve consists of two sigmoid curves?

Mengapakah lengkung pertumbuhan ini terdiri daripada dua lengkung sigmoid?

- A The curves represent the two seasons of growth

Lengkung mewakili dua musim pertumbuhan

- B The curves represent the growth of the plant in a year

Lengkung mewakili pertumbuhan pokok dalam setahun

- C The curves represent the growth of the plant throughout the lifespan of the plant

Lengkung mewakili pertumbuhan pokok sepanjang hayat pokok tersebut